21) (Amended) An OFDM packet communication receiver according to claim 18, wherein said phase rotation information extraction means comprises a specific symbol signal extraction means for extracting coherently detected signals in predetermined specific OFDM symbols inputted to said phase rotation information extraction means, a reference signal generating means for generating reference signals corresponding to said coherently detected signals provided by said specific symbol signal extraction means, and a phase rotation detection means for detecting phase rotation of said coherently detected signals provided by said specific symbol signal extraction means according to said reference signals provided by said reference signal generating means.

28) (Amended) (Fig.39) An OFDM packet communication receiver according to claim 26, or 27, wherein

a signal quality extraction means is provided for extracting signal quality information of a part or all of subcarrier signals divided by said Fourier transform means,

a signal quality smoothing means is provided for smoothing the signal quality information provided by said signal quality extraction means for each subcarrier along time axis,

said weight means weights to the phase rotation information according to smoothed signal quality information of the coherently detected signals provided by said signal quality smoothing means.

29) (Amended) (Fig.20) An OFDM packet communication receiver according to claim 18, wherein

said signal quality smoothing means carries out moving average process to signal quality information of coherently detected signals provided by said signal quality extraction means along time axis for each subcarrier.

30) (Amended) (Fig.21) An OFDM packet communication receive system according to claim 18, wherein

said signal quality smoothing means integrates the signal quality information of the coherently detected signals provided by said signal quality extraction means along time axis, and divides said integrated value by the number of signals thus integrated.

31) (Amended) (Fig.22) An OFDM packet communication receive system according to claim 18, wherein

said signal quality smoothing means integrates the signal quality information of the coherently detected signals provided by said signal quality extraction means along time axis, and divides said integrated value by bit shifting of N bits when the number of signals thus integrated can be expressed by 2 (N is a natural integer).

32) (Amended) (Fig.38) An OFDM packet communication receive system according to claim 25, wherein

a clock frequency error mitigation means is provided for reducing phase rotation of the phase rotation information provided by said phase rotation information detection means caused by clock

frequency error according to of the phase rotation information provided by said phase rotation estimation means,

said weighting means weights the phase rotation information provided by said clock frequency error mitigation means.

33) (Amended) (Fig.38) An OFDM packet communication receiver according to claim 20, wherein

said common phase rotation detection means (3801) comprises;

an intra-symbol averaging means (3808) for carrying out averaging process to the phase rotation information within one OFDM symbol provided by the phase rotation detection means,

a phase rotation accumulation means (3809) for calculating accumulated phase rotation from that time on the channel estimation according to the averaged phase rotation information provided by said intra-symbol averaging means,

a moving average means (3810) for carrying out moving average process along time axis to the accumulated phase rotation information provided by said phase rotation accumulation means,

a division means (3811) for dividing moving averaged accumulated phase rotation provided by said moving average means by a difference between the number of OFDM symbols used for the accumulation and the number of delayed OFDM symbols caused by moving average process so that phase rotation caused by residual carrier frequency error for one OFDM symbol is obtained.

35) (Amended) (Fig.35) An OFDM packet communication receiver according to claim 34, wherein said phase rotation accumulation means (3501) comprises

a delay means (3505) for delaying the averaged phase rotation information within one OFDM symbol by one OFDM symbol period,

a phase difference calculation means (3504) for calculating difference between the averaged phase rotation information provided by said inter-symbol averaging means and the delayed phase rotation information provided by said delay means so that phase rotation for each OFDM symbol is obtained,

an integration means (3506) for integrating the phase rotation information provided by said phase difference calculation means.

37) (Amended) (Fig.39) An OFDM packet communication receiver according to claim 34, wherein

said division means comprises a bit shift means for carrying out the division process by bit shift operation of N bits when a divisor can be expressed by 2 (N is a natural integer).

39) (Amended) (Fig.24) An OFDM packet communication receiver according to claim 38, wherein

said division means comprises a bit shift means for carrying out division process by bit shift operation of N bits when a divisor can be expressed by 2 (N is a natural integer).